

Appendix 7
Compliance Assistance and/or
Suggestions for Program Improvements

The observations below include compliance assistance and/or suggestions for program improvement.

Part III.E.1 – Stormwater Management Program

Charles County shall maintain an acceptable stormwater management program in accordance with the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland. At a minimum, Charles County shall complete the following:

- a. Conduct preventative maintenance inspections of all stormwater management facilities at least on a triennial basis. Documentation identifying the facilities inspected, the number of maintenance inspections, follow-up inspections, and enforcement action(s) used to facilitate inspection order compliance, maintenance inspection schedules, and any other relevant information shall be submitted in the County's annual reports;
- b. Implement the stormwater management design policies, principles, methods, and practices found in the *2000 Maryland Stormwater Design Manual* and COMAR;
- c. Track the progress toward satisfying Part III.E.1.b. above; and
- d. Report annually the modifications needed to address problems associated with implementing the *2000 Maryland Stormwater Design Manual* in Charles County.

Observation 1: Charles County could consider combining all of their SWM structure tracking systems and paper records into one database. These would include the tables associated with "SWM BMP Inspections" and the "Urban BMP Database" (see Exhibit 10 and 11 in Appendix 4). A combined system would help identify SWM structures that are located inside and outside of the Development District and have one unique identifier (e.g., Planning & Growth Management Number) for each facility. Additionally, while the county keeps paper records of follow up inspections, the county does not track these inspections in their database. Keeping all the records in the database would help the county track progress and resolve issues in a timely manner. For example, while the county visited the Ashford Oaks SWM structure #880075 in 2008, 2011, and 2012 as documented in paper inspection reports, the last inspection for this facility documented in the database is dated October 23, 2006.

Observation 2: Charles County could consider developing a prioritization scheme for SWM structure inspections that are backlogged or overdue. This would allow the county from overlooking SWM structures during triennial inspection scheduling and help prioritize those structures that are the longest overdue for inspection, have unresolved maintenance problems, or ongoing compliance issues (see Observation 4 in the Report).

Observation 3: Charles County could consider updating the codes representing SWM structure types so they are consistent with the codes used by the Maryland Department of the Environment (see Exhibit 12 and

21 in Appendix 4). This would help streamline reporting and tracking of SWM structure inspections.

- Observation 4: Charles County could consider reporting SWM structure inspections inside and outside of the Development District separately, which would help confirm that all the Development District structures are being inspected triennially. A review of the 2012 Charles County's Annual Report showed that the SWM structure inspections reported are all of the inspections conducted throughout the county and does not provide a breakdown of the inspections or enforcement actions taken in the Development District alone (see Exhibit 10, 11, and 22 in Appendix 4).
- Observation 5: Charles County could consider coordinating with SWM structure maintenance staff prior to site inspections so that the condition of the site does not hinder the ability to perform the inspection. Mr. Davis stated that often sites need to be cleared or mowed first before he can conduct an effective inspection. During Mr. Davis's inspection of the Truck'N America site #040097, he noted that he could not do a complete inspection due to the overgrowth and would give the site 90 days to mow the area before he came back for a re-inspection (see Exhibit 14 in Appendix 4 and Photographs 16 through 19 in Appendix 5). For county-maintained facilities, the county could require routine maintenance (e.g., mowing) be completed at regular intervals and schedule inspections after being notified that maintenance was complete. During Mr. Davis's inspection of the public Billingsley Road 3A site #940123 he was unable to go down into the dry pond to check the riser structure due to overgrown vegetation (see Photograph 35 in Appendix 5). He notified the county that a re-inspection would take place after the vegetation in the pond is cleared (see Exhibit 23 in Appendix 4).
- Observation 6: Charles County could consider developing a training program and training materials for new SWM structure inspection staff. Mr. Ray Shumaker, the inspector supervisor, stated that a previous inspector, Mr. Francis Abell, developed the inspection procedures and passed on his knowledge to the current staff through a shadowing process. According to a document provided by Charles County titled "Procedures of BMP Inspections 2013 Final", the county has begun this process by compiling inspection procedures and standardizing checklists and other paperwork (see Exhibit 24 in Appendix 4).
- Observation 7: Charles County could consider establishing and implementing enforcement timeframes and conducting follow up in accordance

with the timeframes to ensure the timely resolution of identified issues. Mr. Davis stated that once issues are identified, the responsible party is given specific timeframes to resolve the issue depending on the severity based on the inspector's discretion. The county could document standard resolution timeframes for various types of issues in its standard operating procedures (SOPs) for SWM structure inspections. Currently, the default language of the inspection letter issued to the responsible party states "Please have the items noted on the checklist repaired within 90 days of the date of this letter" regardless of the issues identified (see Exhibit 14 and 15 in Appendix 4). Currently inside the Development District, there are approximately 122 SWM structures pending a follow-up compliance inspection and 38 SWM structures pending a follow-up inspection with possible enforcement action that have inspection due dates before May 2012 (see Exhibit 10, 11, and 12 in Appendix 4). For example, the Ashford Oaks SWM structure #880075 inspection due on January 27, 2006 is marked as pending a follow-up compliance inspection (see Exhibit 11 in Appendix 4). Follow up inspection documentation does not specify whether all issues identified in 2006 were resolved (see Exhibit 15 in Appendix 4). The EPA Inspection Team observed similar issues during the visit to the site on June 26, 2013 (see Observation 4 in the Inspection Report).

Part III.E.2 – Illicit Connection Detection and Elimination

Charles County shall maintain its illicit connection detection and elimination program. At a minimum, Charles County shall complete the following:

- a. Ensure that all discharges to the municipal separate storm sewer that are not composed entirely of stormwater are either permitted by MDE or eliminated;
- b. Annually, field screen at least 100 outfalls. Each outfall having a discharge or suspected of having an illicit discharge shall be sampled using a chemical test kit;
- c. Report annually the results of field screening activities on MDE's illicit connection detection database. The following narrative shall also be included: the number of illegal storm drain connections, the results of investigations made, any enforcement used, the disposition of all illegal storm drain system connections found as a result of this portion of Charles County's stormwater management program, and an updated list of targeted outfalls and an inspection schedule; and
- d. Identify all County-owned facilities requiring an NPDES discharge permit and submit documentation that a permit has been obtained for each. The implementation status of pollution prevention plans for these County-owned facilities shall also be submitted with the County's annual reports.

Observation 8: Charles County could improve screening of industrial and commercial facilities that have a potential for illicit discharges.

Currently, the county's contractor, KCI, performs ad hoc "windshield surveys" of industrial and commercial areas while performing annual outfall inspections. KCI stated that a windshield survey consists of making visual observations of an area, usually from a vehicle. According to the KCI IDDE SOP (see Exhibit 25 in Appendix 4), industrial and commercial surveys may be performed if an illicit discharge is suspected. There is no inspection schedule or tracking of windshield surveys for industrial and commercial sites. KCI told the EPA Inspection Team that they felt commercial and industrial facility screening was more successful at discovering illicit discharges than outfall screening.

Observation 9: Charles County could improve the follow up activities associated with illicit discharges to ensure that they are eliminated and reduce the chance of recurrence. The county has the authority to inspect and enforce through its ordinance (see Exhibit 18 in Appendix 4). The county could utilize its enforcement mechanism to issue notices of violation or fines to violators. The county could improve public outreach and education at facilities that have the potential for illicit discharges such as car washes and restaurants.

Observation 10: Charles County could coordinate with the Health Department to inspect restaurants that have a potential for illicit discharges. Ms. Karen Wiggen stated that in 2013 the Health Department did not refer any issues to the Codes, Permits, and Inspection Services Division. Charles County could consider providing cross-training to Health Department inspectors to increase their knowledge of the MS4 program and stormwater issues that may be present at sites they inspect.

Observation 11: Charles County could improve and streamline the tracking, reporting, and documenting of outfall investigations and illicit connection detection and elimination resolution activities. Currently, various tracking mechanisms are used. One database exists that is submitted to MDE, which shows the result of annual outfall screening. Open illicit discharges and maintenance issues at outfalls are tracked in a table that is managed by Ms. Karen Wiggen (see Exhibit 16 in Appendix 4). Requests for Assistance (RFAs) are tracked in a database called AS-400. A comprehensive tracking system that keeps all outfall information in one place that could be viewed by all program personnel would increase transparency and avoid duplicative investigations of the same issue. For example, one RFA at Route 488 and Kerrick Swamp was investigated by two parties within the Codes, Permits, and Inspection Services Division on May 18, 2012, because neither party knew that the other was responding to the RFA. A

comprehensive tracking system would also outline more fully the lifecycle of an illicit discharge from discovery through final elimination.

Part III.E.4 – Erosion and Sediment Control

Charles County shall consider applying to MDE for delegation of erosion and sediment control enforcement authority. Erosion and sediment control activities in Charles County currently are the responsibility of MDE's Compliance Program. In addition, erosion and sediment control education activities, specifically "responsible personnel" certification classes, are currently conducted by MDE.

Observation 12: Charles County could consider identifying non-sediment issues during construction site inspections. The EPA Inspection Team shadowed Mr. Eddie Henderson while he conducted an inspection of the New High School construction site, located on Piney Church Road, on June 25, 2013. During the inspection, concrete washout residue was observed near Sediment Trap 3 and in the northern swale to Sediment Basin 1 (see Photographs 36 and 37 in Appendix 5). Mr. Henderson stated he was not sure whether a concrete washout area was designated on the plans and thought there may be a concrete washout area near the front of the site. The EPA Inspection Team did not observe a concrete washout area on the plans or on site. In the construction punchlist completed after the inspection conducted with the EPA Inspection Team, Mr. Henderson noted that a concrete washout area should be installed (see Exhibit 6 in Appendix 4).

Observation 13: Charles County could consider conducting inspections according to the site's erosion and sediment control (E&S) plans. The EPA Inspection Team shadowed Mr. Henderson while he conducted an inspection of the New High School construction site on June 25, 2013. During the inspection, the EPA Inspection Team observed the items below. While on site, the EPA Inspection Team requested to view the plans with county staff in regards to the items below:

- A swale leading to Basin A, an existing stormwater management wet pond located offsite at the northwest corner of the site, was eroded (see Photographs 1 and 2 in Appendix 5). Sediment was located on top of vegetation adjacent to the eroded area. Mr. Henderson stated that he was uncertain of the design and stabilization requirements for this area. E&S plan sheet C-8.20 requires sod stabilization for the swale (see Exhibit 5 in Appendix 4).
- Five unstabilized, uncovered stockpiles were located on site (see Photographs 3 and 4 in Appendix 5). Erosion rills were visible on the stockpiles. Mr. Chuck Donaldson, a county E&S inspector, stated that the stockpile located on the

perimeter of the site had been there since December 2012 (see Photograph 5 in Appendix 5). Mr. Henderson said he was unsure whether the E&S plans identified approved areas for the stockpiles and whether the stockpiles were located in approved areas. While the plans identified approved areas for stockpiles, E&S plan sheets C-8.20 and C-8.26 did not identify any approved areas located along the perimeter of the site, where the stockpile in Photograph 5 was observed (see Exhibit 5 in Appendix 4).

- Concrete washout residue was observed near Sediment Trap 3 and in the northern swale to Sediment Basin 1 (see Photographs 36 and 37 in Appendix 5). Mr. Henderson stated that he was uncertain whether a concrete washout area was designated on the plans.

Observation 14: Charles County could consider implementing an electronic system to schedule and track inspections and enforcement actions. Currently, the county scans inspection reports and stores them in the Laserfiche document management system. However, the county has a backlog of documents that have not yet been scanned and are stored as hardcopies in the construction site file. An electronic system may help the county confirm that all sites are being inspected as required and that enforcement actions are escalated as needed. Additionally, because multiple inspectors may inspect a particular site, an electronic system may help inspectors schedule inspections and consistently track issues. County staff stated they have started the process of converting to an electronic system.

Observation 15: Charles County is not conducting erosion and sediment controls inspections on active construction sites on average once every two weeks as required by Section 244-24 of the Charles County Code or consistently documenting all inspections conducted (see Exhibit 26 in Appendix 4). The EPA Inspection Team formally requested all inspection reports and follow up documentation for the New High School construction site be provided after the inspection. Prior to the inspection report for the inspection conducted with the EPA Inspection Team on June 25, 2013, the last inspection reports were dated January 3, 2013, and November 1, 2012 (see Exhibit 6 in Appendix 4). Mr. Henderson stated that he was assigned the site approximately one month prior to the EPA inspection and the last inspector for the site left the county in December 2012. He stated that in the interim, the other inspectors had taken turns inspecting the site. During the inspection on June 25, 2013, the EPA Inspection Team observed a number of issues (see Observation 2 in the Report and Observation 12 above).

The EPA Inspection Team also formally requested all inspection reports and follow up documentation including enforcement documentation for the Leighland Meadows construction site be provided after the inspection. Prior to the inspection report dated June 19, 2013, the last inspection report was dated May 8, 2012. Two inspections reports were dated between October 4, 2011 and May 8, 2012 (see Exhibit 27 in Appendix 4). Charles County staff stated that the site had been inspected and stop work orders (SWOs) were issued approximately three weeks to one month prior to the EPA Inspection Team's visit on June 25, 2013. No documentation of these inspections or the SWOs were provided. During the EPA Inspection Team's visit, the following items were observed:

- On Lot 9, sediment accumulation was present against and on top of the silt fence near the back of the lot (see Photograph 38 in Appendix 5). Sediment was present beyond the silt fence. Charles County staff stated that this lot was still under the SWO issued prior to the EPA inspection.
- Erosion was present on the banks of Sediment Trap 3 (see Photographs 39 and 40 in Appendix 5). The basin was mostly stabilized. Remnants of super silt fence were present behind the wood fence surrounding the basin. Mr. Paul Zielinski, a county E&S inspector, stated that the erosion appeared to be occurring along the trench where the super silt fence had been removed.
- Water was leaking through the weir wall of Sediment Trap 3 (see Photograph 41 in Appendix 5).

Charles County staff stated that in addition to erosion and sediment control, inspectors are also responsible for inspecting roads, stormwater management facilities, storm drains, and water and sewer.

Observation 16: Charles County could consider establishing standard resolution and enforcement timeframes for typical issues observed on construction sites. Chapter 7 of Charles County's Sediment and Erosion Control Inspector's Manual, dated October 2006, states that the inspector shall set the time period allowed to correct the violations and identifies typical violations (see Exhibit 28 in Appendix 4); however, no suggested timeframe for resolution of each item is provided. Establishing standard timeframes may help the inspectors schedule reinspections and ensure consistency across the program.

Part III.F.4 – Watershed Restoration Efforts

Within 30 months of the issuance of this permit, Charles County shall begin to implement restoration efforts according to the schedule outlined Part III.F.3.f [of the permit]. Annual reports shall document the following:

- a. The progress toward meeting the schedule identified above;
- b. The estimated cost and the actual expenditures for program implementation; and
- c. The monitoring data or surrogate parameter analyses used to determine water quality improvements.

Observation 17: Charles County could consider implementing watershed restoration projects at a quicker pace to show progress towards treating ten percent of the county's untreated impervious area¹ in the Development District. In 2010 the untreated impervious area in the Development District was estimated to be 2,863 acres (see Exhibit 29 in Appendix 4). Since the start of the permit term in 2002, the county has implemented four watershed restoration projects within the Development District that treat 44.7 impervious acres total (see Table 18 in Exhibit 30 in Appendix 4). MDE stated in their audit of the 2011 and 2012 Annual Reports that the county needs to improve its pace of implementation of watershed restoration projects (see Exhibit 31 and 32 in Appendix 4). Charles County could more explicitly describe in their annual report the challenges associated with watershed restoration projects and roadblocks that have hindered quicker implementation.

¹ The requirement for restoration efforts on ten percent of the county's untreated impervious area is per Part III.F.2.b. of the permit.